

Date:1 Nov 00

STATEMENT OF WORK (SOW)
for the
RESTORATION, OVERHAUL, AND REPAIR (ROR)
of the
ANTENNA-TRANSMITTER GROUP, OE-340/TPS-59
NSN 5840-01-276-5284

SOW-02-844-2-8C778B-1/1

1. This SOW identifies the work effort that shall be performed by the Contractor to ROR the AN/TPS-59 (V) 3 Antenna-Transmitter Group, OE-340/TPS-59, NSN 5840-01-276-5284, part number 7327351G3, CAGE 03538.
2. The attached manuscript has been reviewed and is concurred upon by the following signers:

LAWRENCE E HERNDON
Weapon Systems Manager
Radar Systems Section (Code 844-2)
MARCORSYSCOM, Albany, GA

VIRGINIA A WILSON
Team Leader
Inventory Management Specialist
(Code 844-2)
MARCORSYSCOM, Albany, GA

RICHARD E JONES
Team Leader
Equipment Specialist
(Code 844-2)
MARCORSYSCOM, Albany, GA

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1.0 Scope: This SOW establishes and identifies the general and detailed tasks that shall be performed by the Contractor (for the purposes of this SOW, Contractor is defined as a commercial or government entity) for the Restoration, Overhaul, and Repair (ROR) of the AN/TPS-59(V)3 Antenna-Transmitter Group, OE-340/ TPS-59, NSN 5840-01-276-5284, CAGE 03538, part number 7327351G3.

1.1 Definitions

1.1.1 Restoration: The process of upgrading an item to conform to the applicable technical specifications in order to assure compliance with specified operational capabilities, physical appearance, and configuration. It includes the repair or replacement of parts/components that have failed or are of marginal quality/reliability due to wear, deterioration, or damage as well as cosmetic reconditioning. Restoration shall include all applicable alignments/calibrations and verification that approved Engineering Change Proposals/Modifications have been installed properly and are functional. In the event that non-approved configuration items are discovered, the equipment shall be returned to its current approved configuration.

1.1.2 Overhaul: The process of totally reconditioning an item to conform to all current technical specifications for that item, thereby providing a life expectancy equivalent to similarly configured new equipment, through the repair/replacement of components that have failed, are of marginal performance, or are reasonably expected to fail due to wear/damage/ deterioration. Additionally, structural/cosmetic repairs shall be performed to the degree that the item is comparable to new equipment. For the purposes of this SOW, all approved Engineering Change Proposals (ECPs) and modifications shall be installed/verified as part of the overhaul work effort.

1.1.3 Repair: The process of returning an unserviceable item to full operational status by repair/replacement of its component parts and performing any alignments/calibrations as may be necessary. Cosmetic/structural repairs are not included in the repair process unless those repairs impede the operational functionality of the item.

1.1.4 Marginal quality: Deteriorated or damaged parts that are reasonably anticipated to fail thereby significantly reducing the expected reliability of an assembly/equipment. An expanded definition and associated requirements for replacement of parts/components adjudged to be of marginal quality is contained in MIL-STD-2110 (EC). Specific requirements of this SOW along with the general requirements as contained in MIL-STD-2110 (EC) shall be used to identify and necessitate the replacement of marginal quality items.

1.2 Order of Precedence. In the event of conflict between this SOW and other references, the requirements as set forth in this SOW shall take precedence. Any remaining conflicts shall be resolved at the discretion of the WSM.

2.0 Applicable Documents

The following documents form a part of this SOW to the extent specified. Unless otherwise specified, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DoDISS) and Supplement thereto which is in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall the superseding requirement.

2.1 Military Specifications

MIL-A-8625	Anodic Coatings for Aluminum and Aluminum Alloys
MIL-C-5541	Chemical Conversion Coatings on Aluminum and Aluminum Alloys
MIL-I-631	Insulation, Electrical, Synthetic Resin Composition, Non-rigid
MIL-R-29466C	System Specifications for the AN/TPS-59 (V)3

2.2 Military Standards

MIL-STD-129	DoD Standard Practice for Military Marking
MIL-STD-2073-ID	DoD Standard Practice for Military Packaging
MIL-STD-2110 (EC)	Restoration, Overhaul, and Repair of Electronic Equipment

2.3 Other Government Documents and Publications The latest issues of those documents cited below shall be used.

LI-07751A-12B	{AN/TPS-59 (V)1} Lubrication Instruction
SL3-07751B	Components Listing, Radar Set AN/TPS-59 (V)3
TM-07751B-14/2	Operation and Maintenance Instructions, Antenna-Transmitter-Receiver Group
TM-07751B-14/3	Maintenance Prints, Antenna-Transmitter-Receiver Group
TM 4750-15/1	Painting and Registration Marking of Marine Corps Combat and Tactical Equipment
RS-07751A-50	{AN/TPS-59 (V)1} Rebuild Standard
TI-4400-15/1	Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items
7327351	Engineering Drawings for AN/TPS-59 (V)3 Antenna-Transmitter Group, OE-340/TPS-59, (along with all sub-tiered drawings referenced therein)

Military Handbooks (For Guidance)

MIL-HDBK-61 Configuration Management Guidance

- 2.4 Industry Standards
 ANSI/ISO/ASQC Q9002-1994 Quality Systems - Model for Quality Assurance in
 Production, Installation, and Servicing
 ANSI/EIA 625 Requirements for Handling Electrostatic-Discharge
 Sensitive (ESDS) Devices

Industry Standards (For Guidance)

ANSI/EIA-649 National Consensus Standard for Configuration
 Management

{Copies of military standards and specifications are available from the DOD Single Stock Point, Document Automation and Production Service, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2179 or DSN 442-2179, or <http://dodssp.daps.mil>. Copies of other government publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracting Officer: Commander, Attn: Contracting Officer (Code 891), Marine Corps Logistics Base, 814 Radford Blvd., Albany, GA 31704-1128, commercial telephone number (229) 639-6761 or DSN 567-6761. Copies of engineering drawings shall be obtained from: Life Cycle Management Center, Attn (Code 851-3), 814 Radford Blvd Suite 20320, Albany GA 31704-0320, commercial telephone number (229) 639-6410 or DSN 567-6410.}

Additional guidance may be provided by the Weapon System Manager (WSM), Marine Air Command and Control Branch (Code 844-2), C4I Division, Life Cycle Management Center, 814 Radford Boulevard, Marine Corps Logistics Bases, Albany, Georgia, 31704-0320, as well as other approved commercial/industry practices and standards.

3.0 Requirements. Although this SOW along with the referenced documents provide extensive information relative to the ROR, the information and guidance is limited to establishing only the minimum requirements essential to perform the ROR process necessary to restore the Antenna-Transmitter Group to Condition Code "A". (Condition Code "A", for the purposes of this SOW, is defined as "serviceable and issuable without limitation or restriction".)

3.1 General Tasks: In performing the specified requirements, the Contractor shall:

3.1.1 Provide all parts, materials, labor, facilities, tools, and test equipment necessary to restore, overhaul, and/or repair the Antenna-Transmitter Group. Upon successful completion of the ROR, the Antenna-Transmitter shall be Condition Code "A".

3.1.2 Perform all actions necessary for the equipment to be transported to the receiving Marine Corps unit via air-ride truck (for CONUS shipments), or priority air shipment via Military Airlift Command in case(s) where the delivery is OCONUS, as directed by the WSM.

3.1.3 Coordinate equipment receipt, emplacement, assembly, and joint acceptance testing with the receiving unit.

3.1.4 Budget for the required Temporary Additional Duty (TAD) funding as part of the ROR process and provide technical service personnel (actual number to be determined by the Contractor) to the receiving unit to perform joint acceptance testing. Repairs to and packaging of electrostatic sensitive items shall be accomplished in accordance with ANSI/EIA 625.

3.2 Detailed Tasks

3.2.1 Pre-induction. Contractor technical personnel shall perform an on-site Limited Technical Inspection (LTI) on the next Antenna-Transmitter Group scheduled for ROR induction, utilizing SL3-07751B, TM-07751B-14/2 and TM-07751B-14/3 for inventory and operational status of the equipment. The (Contractor format) pre-induction LTI shall identify any shortages, long lead-time materiel requirements, and the overall condition of the equipment to be inducted for ROR. The WSM shall be informed of any equipment shortages in order to coordinate resolution actions. Identification of required long lead-time materials and the overall condition are envisioned to assist ROR management personnel in the reduction of overall ROR processing time.

3.2.2 Induction and ROR. Upon receipt of the Antenna-Transmitter Group at the Contractor's repair facility, a second "receipt" LTI shall be performed to identify any transportation-related damages incurred in-transit. Additionally, any differences between the "receipt LTI and the pre-induction LTI shall be noted and follow-up action coordinated with the WSM, as appropriate. In the event of any transportation related damage(s), the cognizant Transportation Management Office shall be notified, in writing, within 5 working days of receipt.

ROR, in accordance with this SOW and its references, shall commence within 5 days of receipt of the Antenna-Transmitter Group at the Contractor's facility. 7327351, LI-07751A-12B, TM-07751B-14/2, TM-07751B-14/3, TM-4750-15/1, RS-07751A-50, MIL-R-29466C, and ANSI/EIA 625 should be referenced, in particular, for informational purposes and to ensure compliance with established mandatory work requirements. In addition to other requirements contained elsewhere in this SOW and references cited herein, the following "mandatory tasks" shall be accomplished, language and requirements as contained in the references notwithstanding:

3.2.2.1 Trailers:

- a. 100 % replacement of all bearings/bearing assemblies, seals, master/wheel brake cylinders, and air/hydraulic converters.
- b. Check/replace brake pads, turn/replace brake drums, check/replace all interlock micro-switches, trailer splice bolts/nuts, and electrical cable connectors.
- c. Ensure that no paint or other foreign material enters/blocks the air release openings on the air/hydraulic converters.

3.2.2.2 Platform:

- a. 100% replacement of all cables/cable assemblies between the receiver/transmitter/ Distribution Array Data (DAD) and all seals/gaskets on cover panels. Electrical connectors (on all

applicable assemblies and sub-assemblies of the antenna platform and array portions of the antenna-transmitter group) shall be sealed with synthetic resin insulation compound conforming to MIL-I-631.

- b. Check/replace, as necessary, the slip-ring assembly and cooling fans.

3.2.2.3 Array:

- a. Replace rails and drive gears for the maintenance lift, all rubber/plastic insulated cables/cable assemblies (including insulation boots), the IFF "HELIX" cable, and wing lock hardware.

- b. Check/replace, as necessary, all interlock micro-switches, array splice bolts and associated splice brackets (warranted items), bolts/nuts/helicoils.

3.2.2.4 Aluminum and aluminum alloy hardware shall be treated in accordance with MIL-A-8625 or MIL-C-5441, as applicable, to provide protection from corrosion/oxidation.

3.2.2.5 Following reassembly of the Antenna-Transmitter Group, the Contractor shall conduct a final full system operational test using the (Contractor format) Acceptance Test/LTI form(s) for documentation. In addition to the system operational test, the antenna transmitter array shall be tested utilizing the Space Probe Antenna Characterization System (SPACS) to ensure proper operation of all antenna array RF components.

3.2.3 Packaging, Handling, Storage, and Transportation (PHS&T)

- a. Upon successful completion of final testing and certification of condition code "A" status, the Contractor shall be responsible for preservation, packaging, and coordinating for shipment items to be delivered under the terms of this statement of work. All items shall be level B packed in accordance with the requirements of MIL-STD-2073-1D, Appendix A, Table A.VI., Electronic Equipment. Since any overseas shipments must be made via priority Military Airlift Command (MAC) and all shipments will result in immediate use, no level A preservation, packing, & packaging requirements exist.

- b. Marking shall be in accordance with MIL-STD-129.

- c. The Marine Corps will provide the contractor with the shipping address(es) for delivery of the Antenna-Transmitter Group. The contractor shall be responsible for arranging for priority shipment to the pre-designated site(s). The Marine Corps will be responsible for transportation costs associated with movement of the equipment to and from the Contractor's repair facility.

3.3 Configuration Management. The contractor shall apply configuration control procedures to established configuration items. The contractor shall not implement configuration changes to an item's documented performance or design characteristics without prior written authorization. All permanent changes to the form, fit or function of the baseline shall be by Engineering Change Proposal. MIL-HDBK-61 (paragraph 4.2 and Table 4-6) and ANSI/EIA-649 (paragraph 5.3.1) provide guidance for preparing this configuration control document. If it is necessary to temporarily

depart from the authorized configuration, the contractor shall prepare and submit a Request For Deviation. MIL-HDBK-61 (paragraph 4.3 and Table 4-9) and ANSI/EIA-649 (paragraph 5.3.4) provide guidance for preparing this configuration control document.

3.4 Government Furnished Equipment (GFE) and Government Furnished Materiel (GFM).

GFE is government owned equipment authorized by contract for use by a commercial/Government contractor. It is neither consumed during production nor incorporated into any product. GFM is materiel furnished to a contractor that will be consumed during the course of production or incorporated into the product being manufactured/remanufactured under a contract/statement of work. In the event the Marine Corps does have GFE/GFM requirements, the Management Control Activity (MCA/Code 827-2), Marine Corps Logistics Bases, Albany, GA 31704-0320 will coordinate GFE requirements and will maintain central control of Marine Corps assets in the contractor's possession. The MCA will forward a GFE Accountability Agreement to the contractor for signature thereby establishing a chain of custody and property responsibilities for Marine Corps assets. The contractor shall report receipt of all GFM and report consumption of GFM to the MCA. The MCA, in conjunction with the WSM, reserve the right to deny any requests for GFE/GFM. Under no circumstances shall denial of such requests form a basis for either work stoppages or delays in delivery.

3.5 Electromagnetic Environmental Effects (E3) Procedures

The Contractor shall plan for and use proper E3 control procedures in the ROR process in conjunction with TI-4400-15/1 and ANSI/EIA 625.

3.6 Quality Assurance Provisions

The Contractor shall provide and maintain a Quality System that, as a minimum, adheres to the requirements of ANSI/ISO/ASQC Q9002-1994, Quality Systems - Model for Quality Assurance in Production, Installation, and Servicing.

3.7 Warranted Items

The following items have been warranted by Lockheed Martin Corporation for a period of 15 years from the original date of installation. In the event that defects are discovered during the ROR process, the WSM (designated as warranty administrator) shall be notified in writing, within 5 working days from the time the defect is discovered.

<u>Part Number</u>	<u>Nomenclature</u>
77C724594	Bracket, angle
77C724595	Backer plate
77D614885	Brace, cross arm
77D614886	Bracket, angle
77D614887	Clamp, housing bearing unit
77E300173	Support, upper left
77E300174	Support, upper right

77E300175	Support, lower left
77E300176	Support, lower right
77E300177	Support, structural
77E300178	Support, structural
77E300179	Mounting, support, ballscrew
77E300180	Mounting, support, antenna array

4.0 Reports

a. The Contractor shall develop a Test Data Report (TDR) which portrays all test specifications/requirements (as contained in the engineering drawings) applicable to the Antenna-Transmitter Group and its major subassemblies, acceptable parameters, and documents the specific results obtained during final diagnostic testing. Additionally, the TDR shall reference this SOW, the NSN, part number, and serial number of the Antenna-Transmitter Group. Upon request, a copy of the TDR shall be submitted electronically (preferred), via regular mail, or facsimile, to the WSM. Electronic address is: "mbmatcom844-2@matcom.usmc.mil". Mailing address is: COMMANDER, ATTN (CODE 844-2/WSM), MARCORSYSCOM, 814 RADFORD BLVD STE 20343, ALBANY GA 31704-0343. Facsimiles may be sent to commercial (229) 639-5498 or DSN 567-5498, attention Weapons System Manager, Code 844-2.

b. The Contractor shall provide a copy (either hard copy or via electronic media) of the pre-induction LTI to the WSM within 15 calendar days after completion of the inspection. The Pre-induction LTI shall consist of the TDR and extract of SL3-07751B (as applicable to the Antenna-Transmitter Group). Electronic address is: "mbmatcom844-2@matcom.usmc.mil". Mailing address is: COMMANDER, ATTN (CODE 844-2/WSM), MARCORSYSCOM, 814 RADFORD BLVD STE 20343, ALBANY GA 31704-0343. Facsimiles may be sent to commercial (229) 639-5498 or DSN 567-5498, attention Weapons System Manager, Code 844-2.

c. The Contractor shall provide a hard copy (with the signature of the unit's Commanding Officer or his designated representative) of the Acceptance LTI to the WSM within 15 calendar days after completion of the inspection. The Acceptance LTI shall be similar to the Pre-Induction LTI, with provisions for the additional required signature. Electronic copies of this report are not acceptable. Mailing address is: COMMANDER, ATTN (CODE 844-2/WSM), MARCORSYSCOM, 814 RADFORD BLVD STE 20343, ALBANY GA 31704-0343.

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 1704-0188

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A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY: TDP _____ TM _____ Other XXX _____	
D. SYSTEM/ITEM Antenna-Transmitter, Group, OE-340/TPS-59		E. CONTRACT/PR No.		F. CONTRACTOR	
1. DATA ITEM No. A001	2. TITLE OF DATA ITEM Engineering Change Proposal			3. SUBTITLE Configuration Management	
4. AUTHORITY (Data Acquisition Document No.) DI-CMAN-80639C		5. CONTRACT REFERENCE SOW 3.3		6. REQUIRING OFFICE MARCORLOGBASES (851)	
7. DD 250 REQ. LT	9. DIST STATEMENT REQUIRED A	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION See Blk 16	14. DISTRIBUTION	
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES
					Draft Reg Repro
16. REMARKS Blocks 10 & 12 - ECPs shall be submitted for all proposed changes, which permanently affect the baseline of a configuration item. ECPs will be reviewed and disposition determined within 30 calendar days upon receipt by the government. ECP shall be transmitted via e-mail to the following address: mbmatcomconfigmngmnt@matcom.usmc.mil Distribution Statement A: Approved for public release, distribution is unlimited.				MCLBA (851-2)	0 1 0

17. PRICE GROUP

18. ESTIMATED
TOTAL PRICE

G. PREPARED BY:

H. DATE

I. APPROVED BY:

J. DATE

DD FORM 1423-1, AUG 96 (EG)

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A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY: TDP IM Other AAA					
D. SYSTEM/ITEM Antenna-Transmitter, Group, OE-340/TPS-59		E. CONTRACT/PR No.		F. CONTRACTOR					
1. DATA ITEM No. A002	2. TITLE OF DATA ITEM Request for Deviation (RFD)			3. SUBTITLE Configuration Management					
4. AUTHORITY (Data Acquisition Document No.) DI-CMAN-80640C		5. CONTRACT REFERENCE SOW 3.3		6. REQUIRING OFFICE MARCORLOGBASES (851)					
7. DD 250 REQ. LT	9. DIST STATEMENT REQUIRED A	10. FREQUENCY AS REQ	12. DATE OF FIRST SUBMISSION See Blk 16	14. DISTRIBUTION					
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES				
					Draft FINAL Reg Repro				
16. REMARKS Blocks 10 & 12 - RFDs shall be submitted to obtain authorization to deliver nonconforming material which does not meet the prescribed configuration documentation. RFDs will be reviewed and disposition determined within 30 calendar days upon receipt by the government. RFDs shall be transmitted via e-mail to the following address: mbmatcomconfigmngmnt@matcom.usmc.mil Distribution Statement A: Approved for public release, distribution is unlimited.				MCLBA (851-2)	0 1 0				
								15. TOTAL	0 1 0

17. PRICE GROUP

18. ESTIMATED
TOTAL PRICE

G. PREPARED BY: <i>James C. Pule</i>	H. DATE 14/30/00	I. APPROVED BY: <i>L. E. Fend</i>	J. DATE 30 Nov 00
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